

**PROPOSED REGULATION FOR
DIESEL ENGINES ON COMMERCIAL HARBOR CRAFT**

(Note: The entire text of the sections set forth below is new language proposed to be added under two separate titles of the California Code of Regulations. To save paper, only proposed new section 2299.5, title 13, CCR, is shown below, but identical provisions will be added to title 17, section 93118.5, CCR, when ARB staff present both regulations to the Board for its consideration. Both new sections will be made available for public review and comment at least 45 days prior to the Board hearing).

Adopt new section 2299.5, title 13, California Code of Regulations (CCR), to read as follows:

13 CCR, section 2299.5. Low Sulfur Fuel Requirement, Emission Limits and Other Requirements for Commercial Harbor Craft.

(a) *Purpose.*

The purpose of this section is to reduce diesel particulate matter (PM), oxides of sulfur (SO_x), and oxides of nitrogen (NO_x) from diesel propulsion and auxiliary engines on commercial harbor craft that operate in any of the waters subject to this section ("Regulated California Waters"). This section implements provisions of the Goods Movement Emission Reduction Plan, adopted by the Air Resources Board in April 2006, to reduce emissions and health risk from ports and the movement of goods in California.

(b) *Applicability.*

- (1) Except as provided in subsections (b) and (c) , this section applies to any person who sells, supplies, offers for sale, leases, charters, rents, purchases, owns or operates any new or in-use commercial harbor craft that operates in any of the Regulated California Waters.
- (2) In the event a commercial harbor craft and its engine(s) are subject to the requirements of this section, the regulation for portable compression ignition (CI) engines and equipment (sections 93116-93116.5, title 17, California Code of Regulations (CCR)), and the regulation for off-road CI engines and equipment (sections 2420-2427, title 13, CCR), the requirements of this section shall supersede those of the other two regulations for all engines on the vessel that are permanently affixed to the vessel (i.e., the engine, its fueling system, or its exhaust system is welded or otherwise physically connected to the vessel or other vessel system in such a way that the engine cannot be easily removed for use in a land-based application without modifications).
- (3) This section applies to tow and tug boats engaged in or intending to engage in the service of pulling, pushing or hauling alongside tank vessels or tank barges.

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- (4) Notwithstanding the provisions of title 13, CCR, section 2299.1 and title 17, CCR, section 93118, this section shall apply to any ocean-going tug and tow boats and shall supersede the requirements of 13 CCR 2299.1 and 17 CCR 93118 in their entirety for ocean-going tug and tow boats. For purposes of this paragraph, “ocean-going tug and tow boats” shall mean tug and tow boats with a “registry” (foreign trade) endorsement on its United States Coast Guard certificate of documentation, or tug and tow boats that are registered under the flag of a country other than the United States..
- (5) Nothing in this section shall be construed to amend, repeal, modify, or change in any way any other applicable State, U.S. Coast Guard, or other federal requirements. Any person subject to this section shall be responsible for ensuring compliance with both U.S. Coast Guard regulations and the requirements of this section and any other applicable State and federal requirements, including but not limited to, obtaining any necessary approvals, exemptions, or orders from the U.S. Coast Guard.
- (6) This section shall not apply to any engine and equipment that fall within the scope of the preemption of Section 209(e)(1)(A) of the Federal Clean Air Act (42 U.S.C. 7543(e)(1)(A)) and as defined by regulation of the U.S. Environmental Protection Agency.

(c) *Exemptions.*

All or portions of this section do not apply to the following , as indicated below, which may be subject to other State and federal regulations and requirements. All other portions of this section shall apply unless otherwise indicated:

- (1) temporary replacement vessels are exempt only from the requirements of section e (9);
- (2) temporary emergency rescue/recovery vessels are exempt from this section in its entirety;
- (3) recreational vessels are exempt from this section in its entirety;
- (4) ocean-going vessels, except for ocean-going tug and tow boats, are exempt from this section in its entirety;
- (5) vessel engines currently registered with the Air Resources Board’s (ARB) Portable Engine Registration Program (sections 2450 through 2465, title 13, CCR) are exempt from this section in its entirety.
- (6) registered historic vessels are exempt only from section e (9); and
- (7) military tactical support vessels are exempt from this section in its entirety (?).

(d) *Definitions*

For purposes of this section, the definitions of Health and Safety Code sections 39010 through 39060 shall apply except as otherwise specified in this section:

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- (1) "Alternative Diesel Fuel" means any fuel used in a diesel engine that is not commonly or commercially known, sold, or represented by the supplier as diesel fuel No. 1-D or No. 2-D, pursuant to the specifications in ASTM D975-81, "Standard Specification for Diesel Fuel Oils," as modified in May 1982, which is incorporated herein by reference, and does not require engine or fuel system modifications for the engine to operate, although minor modifications (e.g., recalibration of the engine fuel control) may enhance performance. Examples of alternative diesel fuels include, but are not limited to, biodiesel and biodiesel blends not meeting the definition of CARB diesel fuel; Fischer-Tropsch fuels; emulsions of water in diesel fuel; and fuels with a fuel additive, unless:
 - (A) the additive is supplied to the engine fuel by an on-board dosing mechanism, or
 - (B) the additive is directly mixed into the base fuel inside the fuel tank of the engine, or
 - (C) the additive and base fuel are not mixed until engine fueling commences, and no more additive plus base fuel combination is mixed than required for a single fueling of a single engine.
- (2) "Alternative Fuel" means natural gas, propane, ethanol, methanol, gasoline, hydrogen, electricity, fuel cells, or other technologies that do not meet the definition of CARB diesel or alternative diesel fuel. "Alternative fuel" also means any mixture that only contains these fuels.
- (3) "Auxiliary Engine" means an engine designed primarily to provide power for uses other than propulsion.
- (4) "Averaging" means the exchange of emission credits among engines on vessels in the same owner or operator's fleet.
- (5) "Baseline" means the emissions level of a diesel engine using CARB diesel fuel as configured upon initial marine installation.
- (6) "Barge" means a vessel having a flat-bottomed rectangular hull with sloping ends and built with or without a propulsion engine.
- (7) "CARB" means the California Air Resources Board. CARB can also be referred to as "ARB."
- (8) "California Air Resources Board (CARB) Diesel Fuel" means any diesel fuel that meets the specifications of vehicular diesel fuel, as defined in title 13 CCR, sections 2281, 2282, 2284, 2299, and title 17 CCR section 93116.
- (9) "Carbon Monoxide (CO)" is a colorless, odorless gas resulting from the incomplete combustion of hydrocarbon fuels.

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- (10) "Certified engine" means an engine that is either certified by U.S. EPA as meeting the requirements of title 40, Code of Federal Regulations, Part 94, or by ARB as meeting the requirements of either this section or the standards and requirements for marine engines specified in title 13, CCR, sections 2420-2427.
- (11) "Commercial Harbor Craft" means any private, commercial, government, or military marine vessel including, but not limited to, passenger ferries, tugboats, towboats, push-boats, crew vessels, work boats, pilot vessels, supply boats, research vessels, United States Coast Guard vessels, hovercraft, emergency response harbor craft, and barge vessels that do not otherwise meet the definition of ocean-going vessels or recreational vessels.
- (12) "Crew Vessel" means a self-propelled vessel used for carrying personnel to and from off-shore and in-harbor locations (including, but not limited to, off-shore work platforms, construction sites, and other vessels).
- (13) "Date of Acquisition" means, for a vessel engine subject to this regulation for Commercial Harbor Craft, the date of purchase as defined by the date shown on the front of the cashed check, the date of the financial transaction, or the date on the engine purchasing agreement, whichever is earliest.
- (14) "Diesel Engine" means an internal combustion, compression-ignition (CI) engine, or pilot ignition engine with operating characteristics significantly similar to the theoretical diesel combustion cycle. The regulation of power by controlling fuel supply in lieu of a throttle is indicative of a compression ignition engine.
- (15) "Diesel Fuel" means any fuel that is commonly or commercially known, sold, or represented by the supplier as diesel fuel, including any mixture of primarily liquid hydrocarbons (HC) - organic compounds consisting exclusively of the elements carbon and hydrogen - that is sold or represented by the supplier as suitable for use in an internal combustion, compression-ignition engine.
- (16) "Diesel-Fueled" means a diesel engine fueled in whole or part by diesel fuel.
- (17) "Diesel Oxidation Catalyst (DOC)" means an emission control technology that employs a catalyst to promote oxidation processes in diesel exhaust gases, usually designed to reduce emissions of the organic fraction of diesel particulates, gas-phase HC, and CO.
- (18) "Diesel Particulate Filter (DPF)" means an emission control technology that reduces diesel PM emissions in engine exhaust gases by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

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- (19) “Diesel Particulate Matter (Diesel PM)” means the particles found in the exhaust of diesel engines, which may agglomerate and adsorb other species to form structures of complex physical and chemical properties.
- (20) “Direct Control” means owning, operating, having a contract, lease, or other arrangement to operate a commercial harbor craft.
- (21) “Emission Control Strategy” means any device, system, or strategy employed to reduce emissions from an engine, including, but not limited to, diesel oxidation catalysts, selective catalytic reduction systems, diesel particulate filters, alternative diesel fuels, water emulsified fuels, and any combination of the above.
- (22) “Estuarine Waters” means an arm of the sea or ocean that extends inland to meet the mouth of a river.
- (23) “Excursion Vessel” means a vessel used for a short trip or outing to some place, usually for a special purpose and with the intention of a prompt return, including all public or private excursion vessels, such as dinner cruises, harbor, lake, or river tours, scuba diving expeditions, and whale watching tours.
- (24) “Executive Officer” means the Executive Officer of the California Air Resources Board or his/her designee.
- (25) “Ferry” means any self-propelled vessel or boat owned, controlled, operated, or managed for public use in transportation of carrying passengers, property, or vehicles on scheduled services.
- (26) “Fishing Vessel” means a self-propelled boat or ship that is either: (A) dedicated to the search for, and collection of, fish for the purpose of sale at market or directly to a purchaser(s), or (B) or a vessel used for hire by the general public dedicated to the search for and collection of, fish for the purpose of general consumption.
- (27) “Fleet” means the total number of commercial harbor craft owned, rented, or leased by an owner or operator in an air district or distinct locale within Regulated California Waters or the statewide population of a specific vessel type.
- (28) “Fuel Additive” means any substance designed to be added to fuel or fuel systems or other engine-related engine systems such that it is present in-cylinder during combustion.
- (29) “Homeport” means the port in which a vessel is registered or permanently based.
- (30) “In-Use Commercial Harbor Craft” means a commercial harbor craft that is not a new commercial harbor craft.

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- (31) "In-Use Marine Engine" means a marine engine that is not a new marine engine.
- (32) "Lease" means a contract by which the owner (lessor) of a property, such as a vessel or engine, grants the right to use or occupy the property to another person (lessee) for a specified term and for a specified rent.
- (33) "Level" means one of three categories of Air Resources Board-verified diesel emission control strategies as set forth in title 13, CCR, section 2701 et seq.: Level 1 means the strategy reduces engine diesel PM emissions by between 25 and 49 percent; Level 2 means the strategy reduces engine diesel PM emissions by between 50 and 84 percent; and Level 3 means the strategy reduces engine diesel PM emissions by 85 percent or greater, or reduces engine PM emissions to less than or equal to 0.01 grams per brake horsepower-hour.
- (34) "Low-Use" means the operation of any compression-ignition engine associated with a commercial harbor craft vessel for less than 300 total annual hours of operation in Regulated California Waters, based on the immediately previous calendar year.
- (35) "Military Tactical Support" means a vessel that meets military specifications, is owned by the U.S. Department of Defense or the U.S. Military services or its allies, and is used in combat, combat support, combat services support, tactical or relief operations or training for such operations.
- (36) "Model Year" means the diesel engine manufacturer's annual production period, which includes January 1st of a calendar year, or if the manufacturer has no annual production period, the calendar year.
- (37) "New Commercial Harbor Craft" means a commercial harbor craft built, or for which the keel was laid, on or after January 1, 2009.
- (38) "New Marine Engine" means a marine engine manufactured or imported on or after January 1, 2009.
- (39) "Newly Purchased, Leased, or Rented Commercial Harbor Craft" means commercial harbor craft, or a diesel-fueled CI engine installed on a commercial harbor craft, that is purchased, rented, or leased by an owner or operator in California on or after January 1, 2009, and is operated from a California port.
- (40) "Nitrogen Oxides (NO_x)" means compounds of nitric oxide (NO), nitrogen dioxide (NO₂), and other oxides of nitrogen, which are typically created during combustion processes and are major contributors to smog formation and acid deposition.
- (41) "Non-Methane Hydrocarbons (NMHC)" means the sum of all hydrocarbon (HC) air pollutants except methane.

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- (42) “Ocean-going Vessel” means a commercial, government, or military vessel meeting any one of the following criteria:
- (A) a vessel with a “registry” (foreign trade) endorsement on its United States Coast Guard certificate of documentation, or a vessel that is registered under the flag of a country other than the United States. The provisions of this paragraph notwithstanding, a tug or tow boat with a registry, or is registered under a non-U.S. flag, shall be deemed a commercial harbor craft, instead of an ocean-going vessel, for purposes of this section;
 - (B) a vessel greater than or equal to 400 feet in length overall (LOA) as defined in 50 CFR § 679.2, as adopted June 19, 1996;
 - (C) a vessel greater than or equal to 10,000 gross tons (GT ITC) per the convention measurement (international system) as defined in 46 CFR 69.51-.61, as adopted September 12, 1989; or
 - (D) a vessel propelled by a marine compression ignition engine with a per-cylinder displacement of greater than or equal to 30 liters.
- (43) “Operate” means steering or otherwise running the vessel or its functions while the vessel is underway, moored, anchored, or at dock.
- (44) “Out of State Vessel or Non-Resident” means any vessel that has not been reported as a resident vessel in the initial reporting on or before January 31, 2009.
- (45) “Own” means having all the incidents of ownership, including the legal title, whether or not that person lends, rents, or pledges the vessel; having or being entitled to the possession of a vessel as the purchaser under a conditional sale contract; or being the mortgagor of a vessel.
- (46) “Particulate Matter (PM)” means any airborne finely divided material, except uncombined water, which exists as a liquid or solid at standard conditions (e.g., dust, smoke, mist fumes, or smog).
- (47) “Person” includes all of the following:
- (A) any person, firm, association, organization, partnership, business trust, corporation, limited liability company, or company;
 - (B) any state or local governmental agency or public district, or any officer or employee thereof; and
 - (C) the United State or its agencies, to the extent permitted by federal law.

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- (48) "Pilot Vessel" means a vessel designed for, but not limited to, the transfer and transport of maritime pilots to and from ocean going vessels while such vessels are underway.
- (49) "Port" means any facility used for water-borne commerce. "Port" includes, but is not limited to, facilities also known as "marine terminals" and "roadsteads."
- (50) "Portable CI Engine" means a compression ignition (CI) engine designed and capable of being carried or moved from one location to another. Indicators of portability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. Portable engines are not self-propelled.
- (51) "Portable Engine Registration Program (PERP)" means the statewide program designed to promote the use of clean portable engines in California, as provided for in title 13, CCR, sections 2450 through 2465. Once registered in the program, engines and equipment units can operate throughout the State without being required to obtain individual permits from each air pollution control or air quality management district in which they operate.
- (52) "Propulsion Engine" means an engine that provides power to move a vessel through the water or directs the movement of a vessel.
- (53) "Purchase Date" means the date shown on the front of the cashed check; the date of the financial transaction; or the date on the engine or commercial harbor craft purchase, rental, or lease agreement, whichever is earliest.
- (54) "Push Boat" means any self-propelled vessel engaged in or intending to engage in the service of pulling, pushing, or hauling along side barges or other vessels, or any combination of pulling, pushing, or hauling along side barges or other vessels. "Push boats" include "tow boats."
- (55) "Recreational Vessel" means a vessel that is intended by the vessel manufacturer to be operated primarily for pleasure or leased, rented or chartered to another for the latter's pleasure, excluding the following vessels: (1) Vessels of less than 100 gross tons that carry more than 6 passengers, (2) Vessels of 100 gross tons or more that carry one or more passengers, and (3) Vessels used solely for competition.
- (56) "Registered Historic Vessel" means a vessel listed in the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966 (16 U.S.C. 470).
- (57) "Regulated California Waters" means all of the following:
 - (A) all California internal waters;

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- (B) all California estuarine waters;
- (C) all California ports, roadsteads, and terminal facilities (collectively “ports”);
- (D) all waters within 3 nautical miles of the California baseline, starting at the California-Oregon border and ending at the California-Mexico border at the Pacific Ocean, inclusive;
- (E) all waters within 12 nautical miles of the California baseline, starting at the California-Oregon border and ending at the California-Mexico border at the Pacific Ocean, inclusive;
- (F) all waters within 24 nautical miles of the California baseline, starting at the California-Oregon border to 34.43 degrees North, 121.12 degrees West; inclusive; and
- (G) all waters within the area, not including any islands, between the California baseline and a line starting at 34.43 degrees North, 121.12 degrees West; thence to 33.50 degrees North, 118.58 degrees West; thence to 32.48 degrees North, 117.67 degrees West; and ending at the California-Mexico border at the Pacific Ocean, inclusive.

Note: We will investigate whether we can insert map that visually clarifies “(G)”

- (58) “Rent” means payment for the use of commercial harbor craft or diesel engine for a specified term.
- (59) “Resident Vessel” means any vessel that is owned, rented, or leased which a owner or operator reports as being part of the California commercial harbor craft fleet on or before January 31, 2009.
- (60) “Retirement” or “Retire” means an engine or commercial harbor craft that will be taken out of service by an owner or operator and will not be operated in any of the Regulated California Waters. “Retirement” shall not include an engine or commercial harbor craft that is sold for use outside California then subsequently operated in any of the Regulated California Waters.
- (61) “Supply Vessel” means a self-propelled vessel used for carrying supplies to and from off-shore and in-harbor locations including, but not limited to, off-shore work platforms, construction sites, and other vessels.
- (62) “Tank Barge” means a non-self-propelled vessel constructed or adapted primarily to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue.
- (63) “Tank Vessel” or “Tanker” means a self-propelled vessel constructed or adapted primarily to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue.

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- (64) “Temporary emergency rescue / recovery vessels” means a vessel whose homeport is not within California and is brought into California for the immediate use of emergency rescue or recovery and returns to its home port outside of California at the conclusion of its emergency rescue / recovery mission.
- (65) “Temporary replacement vessels” means a vessel that whose homeport is not within California and is brought into California to be used in California for no longer than 12 months to perform the work of a California vessel that was in service and has been temporarily taken out of service
- (66) “Tier 1 Marine Emission Standards” means the emission standards specified in MARPOL Annex VI NO_x limits for vessels constructed after January 1, 2000 over 130kW and incorporated by the U.S.EPA to represent Tier 1 marine emission standards as set forth in Table 1 below.

Table 1. MARPOL Annex VI Tier 1 Marine Emission Standards for NO_x+HC

Category	Engine Speed	Tier 1 Model Year	NO _x +HC (g/bhp-hr)
1, 2, 3	rpm = 2000	2004	9.8
	130 = rpm <2000	2004	33.57 x rpm ^{-0.2}
	rpm <130	2004	5.37

(40 CFR Part 94)

*converted maximum power rating from 40 CFR 94, which are expressed in g/kW-hr to g/hp-hr by the following: g/kW-hr (0.746) = g/hp-hr.

- (67) “Tier 2 Marine Emission Standards” means the emission standards, as set forth in Table 2 below, promulgated by the U.S.EPA in “Control of Emissions of Air Pollution from New Marine Compression-Ignition Engines at or Above 37 kW; Final Rule” (Vol. 64 No. 249 Fed. Reg. pp.73300-73373, December 29, 1999; also 40 CFR Part 94), which are incorporated herein by reference.

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Table 2. U.S.EPA Tier 2 Marine Emission Standards for NO_x + HC and PM

Category	Displacement (liters/cylinder)	Date	NO _x +HC (g/bhp-hr)*	PM (g/bhp-hr)*	CO (g/bhp-hr)
1	Disp.< 0.9 and power =50 hp*	2005	5.6	0.30	3.7
	0.9 = Disp. < 1.2	2004	5.4	0.22	3.7
	1.2 = Disp. < 2.5	2004	5.4	0.15	3.7
	2.5 = Disp. < 5.0	2004	5.4	0.15	3.7
2	5.0 = Disp. < 15	2007	5.8	0.20	3.7
	15 = Disp. < 20 (power < 4424 hp*)	2007	6.5	0.37	3.7
	15 = Disp. < 20 (power = 4424 hp*)	2007	7.3	0.37	3.7
	20 = Disp. < 25	2007	7.3	0.37	3.7
	25 = Disp. < 30	2007	8.2	0.37	3.7

(40CFR Part 94)

*converted maximum power rating from 40 CFR 94, which are expressed in g/kW-hr to g/hp-hr by the following: g/kW-hr (0.746) = g/hp-hr or kW (1.34) = hp

- (68) Tier III means the emission standards to be promulgated by the U.S. EPA which will replace the proposed standards set forth in Tables 3, 4 and 5 below and which are to be incorporated herein by reference.

Table 3. U.S.EPA Proposed Tier III Standards for Marine Diesel C1 Commercial Standard Power Density

Rated Hp	L/Cylinder	NO _x +HC g/bhp-hr	PM g/bhp-hr	Model Year
< 25 hp	<0.9	5.6	0.30	2009
25 - <100 hp	<0.9 ^a	5.6	0.22	2009
		3.5 ^b	0.22 ^b	2014
100 – 4960 hp	<0.9	4.0	0.10	2012
	0.9 - <1.2	4.0	0.09	2013
	1.2 - <2.5	4.2	0.08 ^c	2014
	2.5-<3.5	4.2	0.08 ^c	2013
	3.5 - <7.0	4.3	0.08 ^c	2012

(a) < 100 hp engines at or above 0.9 L/cylinder are subject to the corresponding 100-4960 hp standards

(b) Option: 0.15 g/bhp-hr PM / 4.3 g/bhp-hr NO_x in 2014.

(c) This standard level drops to 0.07 g/bhp-hr in 2018 for <800 hp engines.

(Draft Locomotive and Marine NPRM Preamble)

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Table 4. U.S.EPA Proposed Tier III Standards for Marine Diesel C1 Recreational and Commercial High Power Density

Rated Hp	L/Cylinder	NOx+HC g/bhp-hr	PM g/bhp-hr	Model Year
< 25 hp	<0.9	5.6	0.30	2009
25 - <100 hp	<0.9 ^a	5.6	0.22	2009
		3.5 ^b	0.22 ^b	2014
100 – 4960 hp	<0.9	4.3	0.11	2012
	0.9 - <1.2	4.3	0.10	2013
	1.2 - <2.5	4.3	0.09	2014
	2.5-<3.5	4.3	0.09	2013
	3.5 - <7.0	4.0	0.09	2012

(a) < 100 hp engines at or above 0.9 L/cylinder are subject to the corresponding 100-4960 hp standards

(b) Option: 0.15 g/bhp-hr PM / 4.3 g/bhp-hr NOx in 2014.

(Draft Locomotive and Marine NPRM Preamble)

Table 5 U.S.EPA Proposed Tier III Standards for Marine Diesel C2

Rated Hp	L/Cylinder	NOx+HC g/bhp-hr	PM g/bhp-hr	Model Year
=<4960 hp	7-<15	4.6	0.10	2013
	15-<20	6.5 ^a	0.20 ^a	2014
	20-<25	7.3	0.20	2014
	25-<30	8.2	0.20	2014

(a) For engines at or below 4424 hp in this group, the PM/NOx+HC Tier III standards are 0.25 / 5.2 g/bhp-hr.

(Draft Locomotive and Marine NPRM Preamble)

(69) Tier IV means the emission standards to be promulgated by the U.S. EPA which will replace the proposed standards set forth in Table 6 below and which are to be incorporated herein by reference.

Table 6 . U.S. EPA Proposed Tier IV Standards for Marine Diesel C1 and C2

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Rated Hp	PM g/bhp-hr	NOx g/bhp-hr	Model Year
>4960 hp	0.09 ^a	1.3	2014
	0.04	1.3	2016 ^b
1877 4960 hp	0.03	1.3	2016 ^c
800 - <1880 hp	0.03	1.3	2014 ^b

(a) This standard is 0.19 g/bhp-hr for engines with 15-30 liter/cylinder displacement.

(b) Optional compliance start dates are proposed within these model years; see discussions in Draft Locomotive and Marine NPRM Preamble .

(c) Option for engines with 7-15 liter/cylinder displacement: Tier 4 PM and HC in 2015 and Tier 4 NOx in 2017.

(Draft Locomotive and Marine NPRM Preamble)

(62) “Total Annual Hours of Operation” means total hours an engine is used for commercial purposes in regulated California waters in one calendar year (January 1 to December 31), based on the immediately previous calendar year. For example, if a vessel is used for commercial fishing and a commercial non-fishing use, the combined total hours for both uses will be the total annual hours.

(63) “Total Hydrocarbons (THC)” or “Hydrocarbons (HC)” mean the total mass of open chain and cyclic hydrocarbon molecules.

(64) “Towboat” means any self-propelled vessel engaged in or intending to engage in the service of pulling, pushing, or hauling along side barges or other vessels, or any combination of pulling, pushing, or hauling along side barges or other vessels.

(65) “Tugboat” means any self-propelled vessel engaged in, or intending to engage in, the service of pulling, pushing, maneuvering, berthing, or hauling along side other vessels, or any combination of pulling, pushing, maneuvering, berthing or hauling along side such vessels in harbors, over the open seas, or through rivers and canals. Tug boats generally can be divided into three groups: harbor or short haul tugs, oceangoing or long-haul tugs, and barge tugs. “Tug boat” is interchangeable with “tow boat” and “push boat” when the vessel is used in conjunction with barges.

(66) “Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines (Verification Procedure)” means the Air Resources Board (ARB) regulatory procedure codified in title 13, CCR, commencing section 2700, which is incorporated herein by

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reference, that engine manufacturers, sellers, owners, or operators may use to verify the reductions of diesel PM or NO_x from in-use diesel engines through the use of a particular diesel emission control strategy.

- (67) “Verified Diesel Emission Control Strategy (VDECS)” means an emission control strategy, designed primarily for the reduction of diesel PM emissions, which has been verified pursuant to the “Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines” in title 13, California Code of Regulations, commencing with section 2700. VDECS can be verified to achieve Level 1 diesel PM reductions (25 percent), Level 2 diesel PM reductions (50 percent), or Level 3 diesel PM reductions (85 percent). VDECS may also be verified to achieve NO_x reductions.
- (68) “Vessel” or “Marine Vessel” means any tugboat, tanker, freighter, passenger ship, barge, or other boat, ship, or watercraft, except those used primarily for recreation.
- (68) “Work Boat” means a self-propelled vessel that performs duties such as fire/rescue, law enforcement, hydrographic surveys, spill/response, research, training, and construction (including drilling).
- (e) *Requirements*

Except as provided in subsection (c), the following requirements shall apply for all commercial harbor craft operated in Regulated California Waters.

- (1) *In-Use Operational Requirements: Diesel Fuel Used in All Commercial Harbor Craft:*

As of January 1, 2009, no person shall fuel or otherwise operate a commercial harbor craft’s diesel engine(s) with any fuel unless the fuel is one of the following:

- (A) CARB Diesel Fuel; or
- (B) an alternative diesel fuel as defined in subsection (d)(2); or
- (C) any alternative diesel fuel that does not meet subsection (e)(1)(B) above but is certified by CARB as meeting the requirements of the Verification Procedure; or
- (D) CARB Diesel Fuel used with fuel additives that meets the requirements of the Verification Procedure; or
- (E) any combination of subsection (e)(1)(A) through (D) above.

- (2) *In-Use Requirements: Installation of Non-resettable Hour Meters:*

As of January 1, 2009, no person shall operate a commercial harbor craft without a properly operating non-resettable hour meter, which measures the number of hours an engine operates, installed for each diesel engine on the vessel.

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(3) *Sales of New Engines for In-Use Commercial Harbor Craft:*

As of January 1, 2009, no person shall sell, offer for sale, lease, rent, import, or otherwise acquire a diesel engine for use in commercial harbor craft that is intended to operate or actually operates in any of the Regulated California Waters unless the engine meets U.S. EPA Marine Emission Standards in effect on the date of acquisition of the new engine. Those diesel engines that do not comply with the U.S. EPA Marine Emission Standards must comply with the following paragraph.

An engine manufactured prior to implementation of new marine engine emission standards, which does not meet the new marine emission standards, may be sold, supplied, or offered for sale for use in commercial harbor craft in any of the Regulated California Waters for up to 6 months after the implementation date.

(There's not much of a precedence for this regulatory idea in 40 CFR 94. There is one section that appears to deal with a sell through-like provision and that's section 94.12 Interim provisions. That section targets recreational vessel engines and there is a list of requirements that must be met.)

(4) *Newly Acquired Commercial Harbor Craft:*

As of January 1, 2009, no person shall sell, offer for sale, import, or otherwise acquire a new commercial harbor craft for use in any of the Regulated California Waters unless each of the diesel engines on the vessel meets the current U.S. EPA Marine Emission Standards applicable on the date of acquisition. Additional requirements apply for propulsion diesel engines in newly acquired ferries, specified in subsection (e)(5)

(5) *Newly Acquired Ferries (Additional Requirements):*

As of January 1, 2009, no person shall sell, offer for sale, import, or otherwise acquire a new ferry with the capacity to transport 75 or more passengers for use in any of the Regulated California Waters unless the propulsion diesel engines on the vessel meet the current U.S. EPA Tier II or Tier III Marine Emission Standards applicable on date of purchase, plus an additional 85% emission reduction (reductions can be achieved using NO_x, PM, or any combination of NO_x and PM emission reductions) *or, reductions can be achieved by installing U.S. EPA Tier IV engine*

(6) *Sales of In-Use Vessels:*

(A) Ferries, Excursion Vessels, Tugs, and Tow Vessels

Except as provided in subsection (c), no person shall sell, offer for sale, lease, rent, import, or otherwise acquire an in-use ferry, excursion, tug or tow vessel for use in any of the Regulated California Waters unless the vessel's engines

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comply with subsection (e)9(B) per the applicable compliance date given in Table 7 or Table 8 of subsection (e)(9)(A).

(B) All Commercial Harbor Craft

No person shall sell, offer for sale, lease, rent, import, or otherwise acquire an out-of-state in-use commercial harbor craft for use in any of the Regulated California Waters unless the vessel engines meet the most current U.S EPA Marine Emission Standards in effect on the date of acquisition of the vessel.

(7) *Multipurpose Commercial Harbor Craft:*

Multipurpose commercial harbor craft that work primarily as a ferry, excursion, tug, or tow vessel and used secondarily as a work, crew, pilot, fishing, supply, or other vessel shall meet the performance standards for owners and operators of ferries, excursion, tugs, and tow vessels. A vessel's total reported engine hours of operation will be used to determine the vessel's primary and secondary application and regulatory compliance.

(8) *Barge and barge type vessels' participation in the Portable Engine Registration Program (PERP) or similar local air district program.*

Barge and barge type vessels that are currently in the PERP or similar program implemented by the local air district can continue participation that program. Barge and barge type vessels not in the PERP or similar local air district program on or before January 1, 2009, must comply with this regulation.

(9) *Harbor Craft Engine Performance Standards: for owners or operators of in-use commercial harbor craft used as ferries, excursion, tug, and tow vessels.*

(A). Compliance Schedule

Persons or entities that own or operate ferries, excursion vessels, tugboats, or towboats in Regulated California Waters shall bring the vessel engines into compliance with the requirements of this regulation on or before December 31 of the applicable compliance year specified in Table 7 or 8 below as applicable. The compliance year for each engine shall be determined from Table 7 or 8 below per the annual hours of operation of the engine as defined in subsection (d)(62) and the engine model year. Vessels and engines specified in subsection (c) are exempt from compliance with this section.

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Table 7: Compliance Dates for In-Use Ferries, Excursion Vessels, Tugboats, and Towboats Except Those with Homeport in South Coast AQMD

Engine Model Year	Total Annual Hours of Operation	Compliance Year
pre- 1975	Greater than or equal to 1500	2009
pre- 1975	Greater than or equal to 300 and less than 1500	2010
1976 - 1985	Greater than or equal to 1500	2011
1976 - 1985	Greater than or equal to 300 and less than 1500	2012
1986 - 1995	Greater than or equal to 1500	2013
1986 - 1995	Greater than or equal to 300 and less than 1500	2014
1996 - 2000	Greater than or equal to 1500	2015
1996 - 2000	Greater than or equal to 300 and less than 1500	2016
2001 - 2002	Greater than or equal to 300	2017
2003	Greater than or equal to 300	2018
2004	Greater than or equal to 300	2019
2005	Greater than or equal to 300	2020
2006	Greater than or equal to 300	2021
2007	Greater than or equal to 300	2022

For example, if a 1982 model year diesel engine on a tugboat operating in California regulated waters was used for 750 hours the previous calendar year, the owner or operator must bring the engine into compliance with the requirements of this regulation by December 31, 2012.

Table 8: Compliance Dates for In-Use Ferries, Excursion Vessels, Tugboats, and Towboats Only with Homeport in South Coast AQMD

Engine Model Year	Compliance Year
Pre-1979	2009
1980 – 1985	2010
1986 – 1990	2011
1991 – 1995	2012
1996 – 2000	2013
2001	2014
2002	2015
2003	2016
2004	2017
2005	2018
2006	2019
2007	2020

(B) Compliance Options:

One of the following compliance options must be used to comply with the regulation for each engine on the vessel by the date specified in Table 7 or 8 above as applicable:

- (i) Option 1: Replace the existing engine with a certified Tier II or Tier III engine whichever meets the U.S. EPA Marine Emission Standards for the current calendar year based on the power and cylinder displacement of the replacement engine; or
- (ii) Option 2: Implement an emission control strategy, with the existing engine, which reduces PM or NOx by a minimum of 25%. If the emission control strategy is not a VDECS, emissions data demonstrating that the non-verified emission control technology achieves a PM or NOx emission reduction of 25 percent or better, using the test methods described in subsections 2299.2(k) or 2299.2(l), must be provided. Upon approval of the Executive Officer, other data may be used to demonstrate emission reduction level, such as:
 - (a) marine engine certification test data for the commercial harbor craft propulsion or auxiliary engine, or engine manufacturer emission test data; or
 - (b) emissions test data from a significantly similar engine used in a significantly similar way; or

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(c) emissions test data used to meet the regulatory requirements of the ARB Verification Procedure for the non-verified emission control strategy implemented.

Implementation of this technology will extend the compliance date for this engine to the compliance date for a model year five years newer, (Model Year + 5). For example, the owner of a 1995 model year engine on a tugboat operating in California regulated waters for 750 hours the previous calendar year, is required to comply by December 31, 2014, per Table 7 above. If an eligible emission control strategy is implemented with this engine prior to the compliance date, the compliance date will be extended to the compliance date for a 2000 model year engine, December 31, 2016. Compliance options, at the time of the extended compliance date, shall be restricted to Options 1, 3, and 4; or

(iii) Option 3: Demonstrate to the Executive Officer that the existing engine meets the applicable U.S. EPA Marine Emissions Standard for the current calendar year based on power and cylinder displacement, using the test method specified in section (k) or (l) or through an alternative method approved by the Executive Officer.

(iv) Option 4: Demonstrate to the Executive Officer that the existing pre-2004 model year engine has been rebuilt to a Tier I U.S. EPA emission standard prior to January 1, 2008. The date the engine was rebuilt to the Tier I standard will be used as the engine model year in Table 7 or 8 to determine a new compliance deadline.

(f) Compliance Extensions.

The Executive Officer may grant an owner or operator an extension from a compliance deadline specified in subsection (e)(9)(A) for one of the reasons set forth below. If a compliance extension is granted by the Executive Officer, the owner or operator shall be deemed to be in compliance as specified by the Executive Officer's authorization until the end of the extension time period. Unless specifically stated, compliance extensions may not be combined or used consecutively, and only one compliance extension type may be granted per engine or commercial harbor craft.

- (1) *Compliance Extension for a Vessel Near Retirement.* If an owner or operator has a vessel with an engine, or engines, subject to a Compliance Option that is scheduled to be retired from the active fleet within one year of the applicable compliance deadline, the owner or operator does not need to apply a Compliance Option to the engines on that vessel for up to one year, provided the owner or operator maintains the appropriate records and documentation, as specified in subsections (i)(1) through (i)(6), regarding the assigned retirement date and the vessel is retired on or before the assigned date. If upon inspection, ARB finds the aforementioned conditions to have not been met, the engines on

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that vessel would be considered in noncompliance from the date that compliance would otherwise have been required under the schedule in subsection (e)(9)(A).

- (2) *Compliance Extension for Changes in Hours of Operation, Sales, and Change of Ownership.* An owner or operator who changes an engine's hours of operation, or a vessel's category, or purchases, leases, rents, or changes ownership of a vessel or engine shall notify the Executive Officer in writing and may request additional time to comply with this regulation according to reporting requirements in subsection (j)(4)
- (3) *Compliance Extension Based on No Suitable Engine Replacement for Commercial Harbor Craft.* An extension may be granted if there is no suitable engine replacement available for a specific vessel. The Executive Officer may grant an annual extension, upon determination that the following circumstances have been met:

The owner or operator has applied in writing to the Executive Officer for a compliance extension for an vessel six months prior the applicable compliance deadline specified in subsection (e)(9)(A) and provided sufficient documentation to meet the conditions set forth below. The owner or operator may, six-months prior to the expiration of the extension, apply for an additional one-year extension. In such a case, the owner or operator shall once again be required to show to the Executive Officer's satisfaction that the conditions set forth below have been met:

- (i) The owner or operator must establish that it has applied a Compliance Option specified in subsection (e)(9)(B) to all applicable engines in its fleet for which a Compliance Option is feasible pursuant to the schedule set forth in subsection (e)(9)(A).
 - (ii) Identify each engine for which the extension is requested as specified in subsections (i)1 through (i)5 where the following applies:
 - (iii) Describe the reason(s) no suitable replacement engine is available to replace the engine and documentation supporting such a claim, including engineering arguments for a compliance extension for each engine or commercial harbor craft.
- (4) *Compliance Extension for Equipment Manufacturer Delays or Installation Difficulties.* An owner or operator who has purchased new equipment within six months or more prior to the required compliance date as specified in subsection (e)(9)(A) in order to comply with subsection (e)(9)(A), including an owner or operator who has been granted a compliance extension per subsections (f)(2) or (f)(3) will be considered in compliance if the new equipment has not been received due to manufacturing delays or if an installer encounters excessive difficulties.

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- (4) *Compliance Extension for Multiple Vessels with Engines Requiring Compliance within the Same Calendar Year.* An owner or operator who has two or more vessels with engines requiring compliance within the same calendar year per Table 7 or 8 of subsection (e)(9)(A) may apply to the Executive Officer for a compliance extension of one year per additional vessel to phase the owner or operator's fleet into compliance.

NOTE: Considering including a variance provision consistent with California Health and Safety Code 42350 through 42364, Variances.

(g) *Diesel Emission Control Strategy Special Circumstances*

An owner or operator shall maintain the original level of emission reduction achieved through the elected Compliance Option for each engine once that engine is required to be in compliance, except under specified special circumstances as follows:

- (1) In the event of a failure or damage of a diesel emission control strategy, the following conditions apply:
- (A) Failure or Damage during the Warranty Period. If a diesel emission control strategy fails or is damaged within its warranty period and the diesel emission control strategy manufacturer or authorized dealer determines it cannot be repaired, the owner or operator shall replace the diesel emission control strategy with the same level diesel emission control strategy or shall apply in writing to the Executive Officer to implement another approved Compliance Option as defined in subsection (e)(9)(B) within 90 days of the failure or damage to the original diesel emission control strategy.
 - (B) Failure or Damage Outside of Warranty Period. If a diesel emission control strategy fails or is damaged outside of its warranty period, and it cannot be repaired, the owner or operator shall apply in writing with the Executive Officer for approval of a Compliance Option, as defined in subsection (e)(9)(B), within 90 days of failure of, or damage to, an out-of-warranty emission control strategy.
- (h) *Alternative Control of Emissions: (ACE).*
- (1) Requirements.
- (A) The purpose of this subsection is to allow any person ("person" or "applicant") the option of complying with the requirements of this subsection in lieu of the requirements of subsection (e). Under this subsection, alternative emission control strategies (AECS) can be implemented as an alternative control of emissions (ACE), provided they result in no greater emissions, expressed in pounds, of diesel PM and NO_x

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from the engines over the applicable calendar year, relative to the emissions that would have occurred under compliance with subsection (e)(9)(B).

- (B) An applicant wishing to participate in an ACE may include one or more commercial harbor craft in the ACE, but an applicant shall only include commercial harbor craft that the person owns or operates under their direct control. For purposes of this subsection, “direct control” shall include, but is not be limited to, commercial harbor craft for which the applicant has a contract, lease, or other arrangement with a third-party for the third-party to operate the commercial harbor craft.
- (C) No commercial harbor craft shall be included in more than one ACE plan.
- (D) Commercial harbor craft included in an ACE must continue to be included in the ACE for the duration of the ACE.
- (E) AECS may include, but are not limited to:
 - (i) engine modifications
 - (ii) exhaust treatment control
 - (iii) engine repower
 - (iv) use of alternative fuels or fuel additives
 - (v) shore-side power
 - (vi) fleet averaging
- (F) The ACE application demonstrating compliance with this subsection shall contain, at a minimum, the following information:
 - (i) the company name, address, and contact information;
 - (ii) the commercial harbor craft and engine(s) subject to the ACE, including the vessel name and identification number(s), engine make, model, and serial numbers, and other information that uniquely identify the engine;
 - (iii) documentation, calculations, emissions test data, or other information that establishes the diesel PM and NO_x reductions, expressed in pounds, will be equivalent to or greater than the emission reductions that would have been achieved upon compliance with subsection (e)(9)(B);
 - (iv) the proposed recordkeeping, reporting, monitoring, and testing procedures that the applicant plans to use to demonstrate continued compliance with the ACE.
- (G) Emission reduction estimates demonstrating equivalence with the requirements of subsection (e)(9)(B) shall include diesel PM and NO_x emissions only from commercial harbor craft to which the ACE applies that

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port within a single specific California air district, or another defined geographic area approved by the Executive Officer.

- (H) Any owner or operator subject to an approved ACE shall maintain operating records in a manner and form as specified by the Executive Officer as an element of any approved ACE. Required records may include, but are not limited to:
- (i) information on hours of operation, fuel usage,
 - (ii) maintenance procedures, and
 - (iii) emissions test results.

Any owner or operator subject to an approved ACE shall retain records and reports for a period of not less than three (3) years and shall submit these records and reports to the Executive Officer in the manner specified in the approved ACE or upon request by the Executive Officer.

- (I) Emission reductions included in an ACE shall not include reductions that are otherwise required by any local, State, or federal rule, regulation, or statute, or that are achieved or estimated from equipment not located in the region to which the ACE applies.
- (J) No person may operate any commercial harbor craft under an ACE unless the applicant has first been notified in writing by the Executive Officer that the ACE application has been approved. Prior to such approval, applicants shall comply with the provisions of this section, including the requirements in subsection (e)(9)(B).

(2) Application Process.

- (A) Applications for an ACE shall be submitted in writing to the Executive Officer for evaluation.
- (B) The Executive Officer shall establish an internet site ("ACE internet site") in which all documents pertaining to an ACE application will be made available for public review. The Executive Officer shall also provide a copy of all such documents to each person who has requested copies of the documents; these persons shall be treated as interested parties. The Executive Officer shall provide two separate public comment periods during the ACE Application process, as specified in subsections (h)(2)(D) and (h)(2)(E).
- (C) Completeness Determination.

Within 15 days after receiving an ACE application, the Executive Officer shall notify an applicant whether the application is deemed sufficiently complete to proceed with further evaluation. If the application is deemed

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incomplete, the notification shall identify the application's deficiencies. The Executive Officer shall have an additional 15-day period for reviewing each set of documents or information submitted in response to an incomplete determination. Nothing in this subsection prohibits the Executive Officer from requesting additional information from the applicant, during any part of the ACE application process, which the Executive Officer determines is necessary to evaluate the application.

(D) Notice of Completeness and 30-Day First Public Comment Period.

After an ACE application has been deemed complete, the Executive Officer shall provide a 30-day public comment period to receive comments on any element of the ACE application and whether the Executive Officer should approve or disapprove the ACE application based on the contents and merits of the application. The Executive Officer shall notify all interested parties of the following:

- (i) the applicant(s);
- (ii) the start and end dates for the 30-day first comment period; and
- (iii) the address of the ACE internet site where the application is posted.

The Executive Officer shall also make this notification available for public review on the ACE internet site.

(E) Proposed Action and 15-Day Second Public Comment Period.

Within 30 days after the first public comment period ends, the Executive Officer shall notify the applicant and all interested parties of ARB's proposed approval or disapproval. This notification shall propose to approve the application as submitted, disapprove the application, or approve the ACE application with modifications as deemed necessary by the Executive Officer. The notification shall identify the start and end dates for the 15-day second public comment period.

During the second public comment period, any person may comment on the Executive Officer's proposed approval or disapproval of the ACE application and any element of the application. The Executive Officer shall also make this notification available for public review on the ACE internet site.

(F) Final Action.

Within 15 days after the second public comment period ends, the Executive Officer shall take final action to either approve or deny an ACE application and shall notify the applicant accordingly. If the application is

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denied or modified, the Executive Officer shall state the reasons for the denial or modification in the notification. The notification to the applicant and approved ACE plan, if applicable, shall be made available to the public on the ACE internet site. In addition, the Executive Officer shall consider and address all comments received during the first and second public comment periods, and provide responses to each comment on the ACE internet site.

(G) Renewal of an Approved ACE.

An applicant can apply for renewal of an approved ACE by forwarding the Executive Officer updated information for all elements of the approved ACE for review and re-approval. The Executive Officer must receive all ACE renewal applications 30 days prior to the end of the compliance period.

(H) Notification to the Executive Officer of Changes to an Approved ACE.

An applicant shall notify the Executive Officer in writing within 30 days upon learning of any information that would alter the emissions estimates submitted during any part of the ACE application process. If the Executive Officer has reason to believe that an approved ACE has been granted to a person that no longer meets the criteria for an ACE, the Executive Officer may, pursuant to subsection (h)(3) below, modify or revoke the ACE as necessary to assure that the applicant and subject vessel(s) will meet the emission reduction requirements in this section.

(3) Revocation or Modification of Approved ACEs.

With 30-days of notice of violation to the ACE holder, the Executive Officer may revoke or modify, as needed, an approved ACE if there have been multiple violations of the ACE provisions or the requirements of the approved ACE plan; or if the Executive Officer has reason to believe that an approved ACE has been granted that no longer meets the criteria or requirements for an ACE or the applicant can no longer comply with the requirements of the approved ACE in its current form. Public notification of a revocation or modification of an approved ACE shall be made available on the ACE internet site.

(i) *Recordkeeping Requirements.*

Beginning January 1, 2009, an owner or operator of commercial harbor craft shall maintain the following records, which shall be provided to an agent or employee of ARB upon request for all commercial harbor craft subject to compliance with the regulation:

(1) Owner or Operator Contact Information

(i) Company name

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- (ii) Contact name, phone number, address, e-mail address
 - (iii) Address where vessel is registered
- (2) Commercial Harbor Craft Name
- (3) Engine Information
- (i) Make of engine
 - (ii) Model of engine
 - (iii) Engine family (if applicable)
 - (iv) Engine serial number
 - (v) Year of manufacture of engine (if unable to determine, approximate age)
 - (vi) Rated brake horsepower
 - (vii) Cylinder displacement
 - (viii) Control equipment (if applicable)
 - a. Type of diesel emission control strategy
 - b. Manufacturer of installed diesel emission control strategy
 - c. Model of installed diesel emission control strategy
 - d. Level of control - pollutants controlled and percent reductions.
- (4) Maintenance records for each installed diesel emission control strategy
- (5) Operation Information
- (i) Describe general use of engine
 - (ii) Total annual hours of operation, based upon readings of the non-re-settable hour meters for previous calendar year.
 - (iii) Estimated percent operating time as a function of distance from shore
- (6) For each vessel for which an owner or operator is claiming an exemption pursuant to subsection (f)(1), the retirement date of each of the vessels associated with the information in subsections (i)(1) through (i)(5).
- (7) For each engine for which an owner or operator is complying by Option2, subsection (e)(9)(B)(ii),, the emission control strategy manufacturer name and contact information (representative, address, and phone number); name and type of emission control strategy; the installation date of the emission control strategy; and, if a VDECS is not being used for compliance, the test plan, and the data demonstrating the emission reduction achieved due to the emission control strategy.
- (8) For each engine for which an owner or operator is claiming an extension pursuant to paragraph (f)(4), the purchase order or signed contract between the owner or operator and seller of the new equipment that has been purchased in order to comply with subsection (e)(9)(B).

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- (9) For each engine an owner or operator claims has been replaced, the owner or operator must provide written documentation that the engine has been dismantled or destroyed.
- (j) *Initial and Compliance Reporting Requirements.*
- (1) Initial Reporting of California Commercial Harbor Craft Fleet. By January 31, 2009, each owner or operator of any commercial harbor craft vessel shall submit the information specified in subsections (i)(1) through (i)(3), and (i)(5) for all commercial harbor craft vessels in their California fleet. A specific owner's or operator's California fleet for the January 31 2009 reporting period is based on the total population of harbor craft in the owner's or operator's California fleet as of January 1, 2009.
- (2) Compliance Plan. By January 31, 2009, each owner or operator of any commercial harbor craft subject to the requirements of subsection (e)(9)(B) shall submit the following information to the Executive Officer in addition to the information required in subsection (j)(1):
- An identification of the planned control strategy (Compliance Plan) for each engine and commercial harbor craft subject to subsections (i)(1) through (i)(5) that, when implemented, will result in compliance with subsection (e)(9)(B). A Compliance Plan is a binding document, but can be revised by an owner or operator prior to the required compliance date(s) with the approval of the Executive Officer.
- (3) Demonstration of Compliance. By no later than the applicable compliance date specified in subsection (e)(9)(A), the owner or operator of an in-use commercial harbor craft subject to the requirements of subsection (e) shall provide the following information to the Executive Officer:
- (A) Information specified in subsections (i)(1) through (i)(3) and (i)(5), and
- (B) An identification of the implementation date and the emission control strategy implemented for each engine in accordance with the requirements of subsections (e)(9)(A) and (e)(9)(B), respectively, for purposes of demonstrating compliance.
- (4) Reporting for change of hours of operation category, new vessels, or change of ownership of vessel(s) or engine(s).
- (A) Owner or operator shall submit a report as specified in subsections (i)(1) through (i)(3) and (i)(5) to the Executive Officer within 30 days of a change of hours of operation category, purchase, lease, rental, or change of ownership of vessel or engine,

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- (B) Within 90 days of change of hours of operation category, purchase, lease, rental, or change of ownership or the earliest applicable compliance date, whichever is later, owner or operator shall submit a report to the Executive Officer describing the compliance plan, as specified in subsection (j)(2).

(k) *Test Method.*

Diesel PM, NO_x, NO, CO, HC, NMHC, and CO₂ testing shall be done in accordance with the applicable method specified in the following International Organization for Standardization (ISO) 8178 Test procedures: (1) ISO 8178-2: 1996(E) ("ISO 8178 Part 2"); or (2) ISO 8178-4: 1996(E) ("ISO 8178 Part 4"), both of which are incorporated herein by reference.

(l) *Additional Reference Method*

- (1) Engine Manufacturer's Emission Certification Data

[NEEDS FURTHER REVIEW]

(m) *Right of Entry.*

An agent or employee of the Air Resources Board has the right of entry to board any commercial harbor craft for the purpose of inspecting propulsion and auxiliary engines and emission control strategies and the associated records to determine compliance with this regulation.

(n) *Severability.*

If any subsection, paragraph, subparagraph, sentence, clause, phrase, or portion of this regulation is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of the regulation.

(o) *Submittal of Documents.*

- (1) All documents required under this regulation to be submitted to the Executive Officer shall be submitted as follows:

California Air Resources Board
Stationary Source Division, Commercial Harbor Craft
P.O. Box 2815
Sacramento, California 95812-2815

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- (2) Electronic submittals of information associated with compliance with this section may be approved by the Executive Officer upon request, provided such electronic submittals use digital signatures that meet the requirements specified in Government Code section 16.5. The Executive Officer may request the submittal of a hard copy of any electronic submittal.

NOTE: Authority cited: Sections 39600, 39601, 41511, 43013, and 43018, Health and Safety Code. Reference: Sections 39000, 39001, 39515, 39516, 41510, 41511, 43013, 43016, and 43018, Health and Safety Code; and *Western Oil and Gas Ass'n v. Orange County Air Pollution Control District*, 14 Cal.3rd 411, 121 Cal.Rptr. 249 (1975).